Title (en)

HOT-ROLLED STEEL SHEET AND PRODUCTION METHOD THEREFOR

Title (de)

WARMGEWALZTES STAHLBLECH UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE D'ACIER LAMINÉE À CHAUD ET PROCÉDÉ DE PRODUCTION S'Y RAPPORTANT

Publication

EP 3150733 A1 20170405 (EN)

Application

EP 14893619 A 20140528

Priority

JP 2014064150 W 20140528

Abstract (en)

A hot-rolled steel sheet has predetermined chemical composition, a sum of a Si content and an Al content is higher than 0.20% and lower than 0.81%, a microstructure includes, by area fraction, 90% to 99% of a ferrite, 1% to 10% of a martensite, and a bainite limited to 5% or less, the grain size of the martensite is 1 to 10 μm, the X-ray random intensity ratio of a {211}<011> orientation which is parallel to a rolled surface of the steel sheet and is parallel to a rolling direction is 3.0 or less.

IPC 8 full level

C22C 38/00 (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/38** (2006.01)

CPC (source: EP KR US)

B22D 11/001 (2013.01 - EP US); **C21D 1/60** (2013.01 - EP US); **C21D 1/613** (2013.01 - EP US); **C21D 8/02** (2013.01 - EP US); **C21D 8/0221** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/22** (2013.01 - KR); **C22C 38/26** (2013.01 - KR); **C22C 38/28** (2013.01 - EP KR US); **C22C 38/38** (2013.01 - EP KR US); C21D 2211/008 (2013.01 - KR)

Cited by

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3150733 A1 20170405; **EP 3150733 A4 20171108**; **EP 3150733 B1 20200422**; BR 112016027395 B1 20200505; CN 106460109 A 20170222; CN 106460109 B 20190129; ES 2793938 T3 20201117; JP 6191769 B2 20170906; JP WO2015181911 A1 20170420; KR 101914848 B1 20181102; KR 20160145794 A 20161220; MX 2016015397 A 20170222; PL 3150733 T3 20200824; US 10513749 B2 20191224; US 2017159149 A1 20170608; WO 2015181911 A1 20151203

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